

C l a i m s

1. Device (20,40,70) comprising:
 - a receiver (21,41,71) for receiving and processing signals at least in a first frequency band;
 - at least a first antenna (216,416,716) which is connected to said receiver (21,41,71);
 - a tuning component (217,417,717) for shifting a frequency response of said first antenna (216,416,716) from said first frequency band to a second frequency band; and
 - a controlling portion (221,421,721) causing said tuning component (217,417,717) to shift said frequency response of said first antenna (216,416,716) from said first frequency band to said second frequency band, in case a wideband noise is expected in said first frequency band.
2. Device (20,40,70) according to claim 1, further comprising a communication system transmitter (22,42,72) for transmitting signals via a radio interface, wherein a transmission of signals by said communication system transmitter (22,42,72) causes wideband noise in said first frequency band, and wherein wideband noise in said first frequency band is expected by said controlling portion (221,421,721) whenever said communication system transmitter (22,42,72) is transmitting signals causing wideband noise in said first frequency band.

3. Device (40,70) according to claim 1 or 2, wherein said receiver (41,71) comprises at least a first receiving chain (43,73) for receiving and processing radio frequency signals in said first frequency band and a second receiving chain (44,74) for receiving and processing radio frequency signals in said second frequency band, wherein said first antenna (416,716) is connected to said first receiving chain (43,73) and in addition via a switching component (418,718) to said second receiving chain (44,74), and wherein said controlling portion (421,721) causes said switching component (418,718) to connect said first antenna (416,716) to said second receiving chain (44,74), in case a wideband noise is expected in said first frequency band.
4. Device (70) according to claim 3, further comprising a second antenna (719), which second antenna (719) has a frequency response at said second frequency band and which second antenna (719) is equally connected via said switching component (718) to said second receiving chain (74), wherein said controlling portion (721) causes said switching component (718) to disconnect said second antenna (719) from said second receiving chain (74), in case a wideband noise is expected in said first frequency band.
5. Device (70) according to claim 4, wherein said controlling portion (721) causes said switching component (718) to connect said first antenna (716) to said second receiving chain (74) and to disconnect said second antenna (719) from said second receiving

chain (74), in case a wideband noise is expected in said second frequency band.

6. Device (70) according to claim 5, further comprising a communication system transmitter for transmitting signals via a radio interface, wherein a transmission of signals by said communication system transmitter causes wideband noise in said second frequency band, and wherein wideband noise in said second frequency band is expected by said controlling portion (721) whenever said communication system transmitter is transmitting signals causing wideband noise in said second frequency band.
7. Device (20,40,70) according to one of the preceding claims, wherein said receiver (21,41,71) is a Global Positioning System receiver for receiving and processing Global Positioning System signals transmitted by Global Positioning System satellites.
8. Device (40,70) according to claim 7, wherein said first frequency band is a Global Positioning System L1 band and wherein said second frequency band is one of a Global Positioning System L2 band and a Global Positioning System L5 band.
9. Method for improving the performance of a receiver (21,41,71), which receiver (21,41,71) is able to receive and process signals at least in a first frequency band, and which receiver (21,41,71) is connected to at least a first antenna (216,416,716), said method comprising:

- determining whether a wideband noise is expected in said first frequency band; and
- shifting a frequency response of said first antenna (216,416,716) from said first frequency band to a second frequency band, in case a wideband noise is determined to be expected in said first frequency band.

10. Method according to claim 9, wherein said receiver (21,41,71) is comprised in a single device (20,40,70) with a communication system transmitter (22,42,72), a transmission of signals by said communication system transmitter (22,42,72) causing wideband noise in said first frequency band, and wherein determining whether a wideband noise is expected in said first frequency band comprises detecting whether said communication system transmitter (22,42,72) is transmitting signals via a radio interface.

11. Method according to claim 9 or 10, wherein said receiver (21,41,71) is able to receive and process signals in said first and said second frequency band, said method further comprising enabling radio frequency signals in said second frequency band received via said first antenna (216,416,716) to be processed by said receiver (21,41,71), in case a wideband noise is determined to be expected in said first frequency band.

12. Method according to claim 11, wherein a second antenna (719) is connected to said receiver (71), which second antenna (719) has a frequency response at said second frequency band, said method further

comprising preventing a processing of radio frequency signals received via said second antenna (719), in case a wideband noise is determined to be expected in said first frequency band.

13. Method according to claim 12, further comprising:
 - determining whether a wideband noise is expected in said second frequency band;
 - enabling radio frequency signals in said second frequency band received via said first antenna (716) to be processed by said receiver (71), in case a wideband noise is determined to be expected in said second frequency band; and
 - preventing a processing of radio frequency signals received via said second antenna (719) by said receiver (71), in case a wideband noise is determined to be expected in said second frequency band.
14. Method according to claim 13, wherein said receiver (71) is comprised in a single device (70) with a communication system transmitter, wherein a transmission of signals by said communication system transmitter causes wideband noise in said second frequency band, and wherein determining whether a wideband noise is expected in said second frequency band comprises detecting whether said communication system transmitter is transmitting signals via a radio interface.
15. Method according to one of claims 9 to 14, wherein said receiver (21, 41, 71) is a Global Positioning System receiver for receiving and processing Global

Positioning System signals transmitted by Global Positioning System satellites.

16. Method according to claim 15, wherein said first frequency band is a Global Positioning System L1 band and wherein said second frequency band is one of a Global Positioning System L2 band and a Global Positioning System L5 band.

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